III.—On some small Mammals from the District of Cuzco, Peru. By Oldfield Thomas.

THE British Museum has received a small collection of mammals obtained in the district of Cuzco by Herr Otto Garlepp, brother of the Herr Gustav Garlepp to whom science is indebted for the discovery of the remarkable mammals from Sahama, Bolivia, described in the 'Annals' for April 1898 *.

In the present series there are examples of Cebus albifrons, Lagothrix Humboldti, a species of Myotis, Sturnira lilium, Putorius macrurus, Dasyprocta isthmica, Rhipidomys leucodactylus, Oryzomys Stolzmanni, Akodon caliginosus, and of the

four following new forms :-

Sciurus æstuans cuscinus, subsp. n.

Allied to the form of the S. astuans group described by Gray as "Macroxus irroratus" † from specimens brought by Bartlett from the Ucayali River, probably from near Sarayaeu. Similar in size, dorsal coloration, and other characters to that animal, but distinguished by its much brighter and more sharply defined under surface, which is a bright yellowish buff throughout, except on the chin and throat, which are whitish. The extreme bases of the belly-hairs are slaty, but this does not show on the surface. Feet becoming more yellowish terminally, the digits, both anterior and posterior, deep orange-yellow. Yellowish ear-patches well-marked. Tail-hairs orange or ringed orange and black for their basal halves, their tips dull orange with a subterminal band of black.

Skull as in S. irroratus, but with much shorter nasals, which are very considerably surpassed posteriorly by the

premaxillary processes. One upper premolar.

Dimensions of the type (an adult male, in skin):

Head and body (c.) 205 millim.; tail (c.) 180; hind foot

s. u.‡ (wet) 46; car (wet) 20.

Skull: basilar length 36·1; greatest breadth 28·4; nasals, length (diagonally) 12·2; palate length from henselion 19·6; diastema 11·6; length of upper tooth-series 7·3.

Hab. Ocabamba, Cuzco.

Type B.M. no. 98. 11. 6. 8. Collected by Herr Otto Garlepp, Nov. 1, 1897.

<sup>Ann. & Mag. Nat. Hist. (7) i. p. 277 (1898).
Ann. & Mag. Nat. Hist. (3) xx. p. 431 (1867).
s. u.=sine ungue.</sup>

Two precisely similar specimens of this squirrel are in Mr. Garlepp's collection. They may be readily distinguished from the co-types of S. irroratus by their yellow digits and other characters above described. They have a considerable resemblance to the Nicaraguan Sciurus Richmondi, Nelson *, which is evidently a member of the same group, but has a browner and less olivaceous general colour, darker belly and feet, and much longer and more posteriorly extended nasals.

S. irroratus has been amalgamated by Alston and others with S. astuans; but in the present state of our knowledge I do not venture to express an opinion as to its proper status.

Nectomys Garleppii, sp. n.

Similar in most respects to N. apicalis, Pet., but with

decidedly shorter feet and broader skull.

General colour about the same glossy greyish-brown found in N. apicalis and grandis, rather darker than in N. palmipes. Sides more grizzled fulvous; belly greyish white, broadly washed with dull buffy, not sharply defined laterally; throat and anal region dull whitish. Anterior part of outer surface of ear black. Upper surface of hands and feet thinly haired, brownish white; soles with 5 pads only. Hairs of tail black above and on the sides, as are most of the proximal ones below, but terminally they are mostly whitish.

Skull broadly and heavily built, although not so much so as in N. saturatus; nasals clongate, produced into a long median point posteriorly; supraorbital ridges widely divergent, their parietal portions markedly convex outwards.

Dimensions of the type (in skin):—

Head and body 205 millim.; tail 200; hind foot s. u.

(wet) 45; ear (wet) 20.

Skull: basilar length (c.) 36; occipito-nasal length 45; greatest breadth 23.7; nasals 18.8×5; interorbital breadth 7.8; greatest separation of temporal ridges on brain-case 16; palate length from henselion 21.5; diastema 13; palatal foramina 7.2×3.1; length of upper molar series 6.9.

Hab. Ocabamba, Cuzco.

Type B.M. no. 98. 11. 6. 21. Collected by Herr Otto

Garlepp. Seven specimens examined.

This Nectomys is no doubt closely allied to the Guayaquil N. apicalis, but as the largest of seven specimens has a hind foot only 45 millim. in length, while in apicalis Peters's type has the same measurement 51 millim., and in two examples from N. Peru collected by Dr. Stolzmann it is 50 and

^{*} P. Biol. Soc. Wash. xii. p. 146 (1898).

52 millim. respectively, the Cuzcan form is evidently distinct enough to deserve a name. Its skull also shows various differences, among which may be specially noted the greater spread of its temporal ridges.

Marmosa rapposa, sp. n.

Allied to M. cinerea, Temm., but with no long fur on the base of the tail, with very long body-fur, and with deep yellow

cheeks and throat.

Size about as in M. cinerea. Fur long, soft and fluffy, the hairs of the back about 16 millim. in length. General colour above buffy grey, the crown of the head similar to the back; centre of face yellowish, passing into the grey on the forehead. Orbital rings deep black, not very broad; a spot at base of whiskers also black, separated from the orbital rings by a narrower yellow line. Cheeks below orbital rings and lips deep orange-yellow, the hairs yellow to their bases; region between eye and ear and round the bases of the latter also yellow, but the hairs greyish proximally. Ears with a well-marked anterior basal projection. Chin deep unmixed vellow, like the cheeks. Chest, belly, and inner sides of limbs buffy yellow, darker on the chest, paler on the belly, the hairs slaty basally except just along the middle line of the belly. Mammary region reddish brown. Line of demarcation on sides quite indistinct, the buffy of the back passing gradually into the yellow of the belly. Outer sides of limbs like back, inner sides like belly; metacarpals brown above, anterior digits and whole upper surface of hind feet dull whitish. Tail practically naked from its base, the bodyfur not extending on to its proximal portion; in colour, as usual, it is black proximally and white terminally, the two colours passing quite gradually into one another.

Skull in size, proportions, and the development and position of the postorbital processes very similar to Central-American examples of *M. cinerea*, therefore very different to the narrow-waisted skull of *M. regina*. Posterior part of nasals well expanded. Postorbital processes triangular, but little anterior to the broad and rounded brain-case. Middle and

posterior premolars approximately equal in size.

Dimensions of the type (an old female) :-

Head and body (in skin) 195 millim.; tail (dried, with vertebræ present) 223; hind foot s. u. (wet) 27.5; ear (wet) 25.

Skull: basal length 43.2, greatest breadth 25.3; nasals, least breadth 3.2, greatest breadth 6.5; interorbital breadth 9;

tip to tip of interorbital processes 11; intertemporal breadth 7.6; palate length from gnathion 26; palate breadth 14.6; combined length of ms.¹⁻³ 7.6.

Hab. Vilcanota River, just north of Cuzco, alt. 1500 m. Type B.M. no. 98. 11. 1. 13. Collected by Otto Garlepp, December 1897.

"Native name Rapposa." (The same word, but spelt

"Rapozo," is also given by Mr. Hopke for M. phaa.)

This Marmosa is distinguishable from M. cinerea by the non-extension of the body-fur on to the tail and by its deep yellow cheeks and throat. In four young specimens sent with the adult female, and no doubt her young, the orange marking round the mouth is equally conspicuous. "Didelphys noctivaga," Tschudi ", agrees with it in some particulars, but the red sides described and figured in that animal readily separate the two, and perhaps indicate that Tschudi's species is a member of the rufous group allied to M. murina.

Marmosa quichua, sp. n.

Allied to M. marica, Thos., but rather larger, as large as the smaller forms of the M. murina group. Tail white

terminally, as in M. cinerea.

General colour above dull fawn, not very dissimilar to that of *M. marica*, but rather darker and less wavy. Fur of back about 8 millim, in length. Black orbital rings of medium development. Lower cheeks, chin, and centre of chest buffy yellowish. Belly buffy fawn, passing gradually into the colour of the back, the hairs slaty at their bases. Uppersides of hands and feet whitish. Tail with its basal half inch furry like the body, the remainder naked, black for its basal, white for its distal half.

Skull larger than in *M. marica*; muzzle narrow; zygomata widely expanded, at least for their posterior halves, but anteriorly, for their orbital portions, their profile viewed from above is concave, very much as in *M. dryas*. Nasals but little expanded posteriorly. Supraorbital rims well defined, beaded, evenly divergent, but not angularly expanded. Last upper premolar slightly smaller than the middle one. Lower canine about equal to the middle premolar, twice as high as the subequal incisors and anterior premolars.

Dimensions (approximate) of the typical skin :-

Head and body 116 millim.; tail 142; hind foot s. u. (wet) 17; ear (wet) 19.

^{* &#}x27;Fauna Peruana,' Mamm. p. 148, pl. viii. (1845).

Skull: basal length 27.5; orbito-nasal length 31; greatest breadth 17.5; nasals 13.6×3.8 ; interorbital breadth 5.2; palate length from gnathion 16.5; palate breadth 9.6. Combined length of $ms.^{1-3}.5.5$.

Hab. Ocabamba, Cuzco.

Type B.M. no. 98. 11. 6. 18. Collected by Herr Otto

Garlepp, October 2, 1897.

This species may be readily distinguished from its allies by its marked cranial characters and its white-tipped tail, a peculiarity found in the *M. cinerea* group, but not in any of the smaller members of the genus.

IV.—On a new Species of Marmosa. By Oldfield Thomas.

In working out Herr Otto Garlepp's two species of Marmosa the following proves also to need description:—

Marmosa phæa, sp. n.

A Marmosa allied to M. cinerea, but very much smaller. Size about two thirds that of M. cinerea. Fur soft and woolly, about 11 millim. long on the back. General colour above buffy greyish brown, browner than in the grey M. cinerea; sides with a tinge of isabelline. Middle line of face greyish white. Orbital markings black, not sharply defined, extending forwards without interruption to the roots of the whiskers. Cheeks, chin, and chest dull buffy yellowish, much duller than in M. rapposa; belly buffy yellow, not sharply defined, the hairs slaty basally. Ears with a basal projection. Limbs coloured externally like back, internally like belly. Carpus, metacarpus, and tarsus brown; fingers, metatarsals, and toes whitish. Tail furry like the body for its proximal three quarters of an inch, then finely scaled, naked, brown basally, white terminally, the two colours mottled at their junction.

Skull with but very slightly developed supraorbital ridges and processes, less than in any other member of this group. Nasals well broadened, the portion behind the broadening longer than usual. Brain-case smooth and rounded, the temporal ridges scarcely perceptible. Middle and posterior

premolars subequal.

Dimensions of the type (an adult female in skin):—
Head and body (c.) 132 millim.; tail (c.) 179; hind foot
s. u. (wet) 21; car (wet) 20.